

REMARKS

Applicants have amended Claims 1, 3, 4, 7, 9, 10 and 13. Applicants respectfully submit no new matter has been added by the present amendment. Support for the amendment can be found generally throughout the text, specifically at page 5, lines 11-13 and 18-24, page 6, line 1-3.

Applicants submit that it is for the inventor to decide what bounds of protection he will seek and he has the right to retreat to otherwise patentable subject matter because only part of what was originally claimed is patentable. In re Johnson, 194 USPQ 187, 195-96 (CCPA 1977).

Claim Objection

Claims 4-10 stand objected as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. Applicants have amended Claims to remove the improper dependencies and accordingly request withdrawal of this ground of objection.

Claim Rejection under 35 U.S.C. § 112

Claims 12, 13, 15 and 16 stand rejected under 35 U.S.C. § 112. Applicants note the Examiner has not advised under which paragraph the claims stand rejected. However, the Applicants have amended the claims as set forth herein and submit the present rejection is moot and accordingly request withdrawal thereof.

Claims Rejection under 35 USC § 101

Claims 13, 15 and 16 stand rejected under 35 U.S.C. §101 because the claimed recitation of a use, without the setting forth any steps involved in the process results in an improper definition of a process. Applications have amended the claims as set forth herein and submit the present rejection is now moot as the claims are directed towards as process.

Claim Rejection under 35 U.S.C. § 102(b)

Claims 1-3 and 11-16 are rejected as being anticipated by Tomoyuki et al. (JP 08-23958). Applicants respectfully traverse this ground of rejection.

Applicants submit to anticipate a claim; the cited references must teach each and every element of the claimed invention, either explicitly or inherently. And according to the Examiner Claims 1 to 3 and 11 to 16 are not novel over Tomoyuki et al., because Tomoyuki et al. teaches a composition comprising 10 to 90% polyamide and 10 to 90% of an ethylene-vinyl acetate polymer.

However, Applicants submit Tomoyuki et al. does not teach each and every element of the claimed invention. Tomoyuki et al. does not teach or suggest the claimed B component but rather the use of an ethylene-vinyl acetate polymer which is saponified.

Paragraphs 001 and 005 of Tomoyuki et al. describe the saponified ethylene vinyl acetate polymer as an EVOH. In the alternative, the present invention includes the employment of one or more olefin vinyl acetate copolymers as elastomers, wherein the copolymer is in a pure form.

The present invention therefore differs from Tomoyuki et al. in at least the aspect of the employment of saponified ethylene-vinyl acetate copolymer having -OH-groups rather than the claimed use of one or more olefin-vinyl acetate copolymers in a pure form.

Since Claims 2 to 10 are directly or indirectly depending on Claim 1 and also claims 11 to 14 refer to Claim 1, Applicants submit that claims 2 to 14 are novel over Tomoyuki et al.

Therefore, Applicants submit Tomoyuki et al. fails to teach each and every element of the claimed invention and accordingly Applicants request withdrawal of this ground of rejection.

Claims 1-3 and 11-16 also stand rejected under 35 USC 103(a) as being obvious in view of Tomoyuki et al. Applicants submit for at least the reasons outlined above Tomoyuki et al also fails to render the present invention obvious. Tomoyuki et al. does not teach, suggest or motivate one skilled in the art to employ a blend of a polyamide and one or more olefin vinyl acetate copolymers in a pure form.

Claim Rejection under 35 U.S.C. § 102(b)

Claims 1-3 and 11-14 and 16 are rejected as being anticipated by Toru et al. (JP 05-140368). Applicants respectfully traverse this ground of rejection. Applicants note the Office Action presents this rejection twice and believe the Examiner meant the second rejection in paragraph 30 to be under 35 USC § 103(a).

Applicants submit to anticipate a claim; the cited references must teach each and every element of the claimed invention, either explicitly or inherently. And according to the Examiner Claims 1 to 3 and 11 to 16 are not novel over Toru et al., because Toru et al. teaches a composition comprising 10 to 90% polyamide and 10 to 90% of an ethylene-vinyl acetate polymer.

However, Applicants submit Toru et al. does not teach each and every element of the claimed invention. Toru et al. does not teach or suggest the claimed B component but rather the use of an ethylene-vinyl acetate polymer which is saponified. Paragraph 9 of Toru et al. describe the saponified ethylene vinyl acetate polymer as an EVOH. In the alternative, the present invention includes the employment of one or more olefin vinyl acetate copolymers as elastomers, wherein the copolymer is in a pure form.

The present invention therefore differs from Toru et al. in at least the aspect of the employment of saponified ethylene-vinyl acetate copolymer having -OH-groups rather than the claimed use of one or more olefin-vinyl acetate copolymers in a pure form.

Since Claims 2 to 10 are directly or indirectly depending on Claim 1 and also claims 11 to 14 refer to Claim 1, Applicants submit that claims 2 to 14 are novel over Toru et al.

Therefore, Applicants submit Toru et al. fails to teach each and every element of the claimed invention and accordingly Applicants request withdrawal of this ground of rejection.

Claims 1-3, 11-14 and 16 also stand rejected under 35 USC 103(a) as being obvious in view of Toru et al. Applicants submit for at least the reasons outlined above Toru et al also fails to render the present invention obvious. Toru et al. does not teach, suggest or motivate one skilled in the art to employ a blend of a polyamide and one or more olefin vinyl acetate copolymers in a pure form.

Claims Rejections under 35 U.S.C. § 103(a)

Claims 1-3 and 11-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tachi et al. (US Patent No. 5,443,874). Applicant respectfully traverses this ground of rejection and submits that the present claims are patentable in view of the cited document(s).

Applicants submit “[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught to suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (Fed. Cir. 1974)”. Applicants also respectfully submit that “in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claims limitations. The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicants’ disclosure.” See MPEP § 2142, citing In re Vaeck, 947 F.2d 488, 20 USPQ 2d. 1438 (Fed. Cir. 1991).

Tachi et al. discloses a hollow multi-layer molding comprising a polyethylene layer; a barrier layer comprising a substance selected from the group consisting of a polyamide resin, a saponified derivative of an ethylene-vinyl acetate copolymer, a thermoplastic polyester, and a mixture of at least two of said polyamide resin, said saponified derivative and said thermoplastic polyester; and an adhesive layer of a modified polyethylene.

The barrier layer comprised in the moldings according to Tachi et al. may comprise a polyamide resin in combination with saponified derivatives of ethylene-vinyl acetate copolymers (see for example column 2, lines 30 to 40). Tachi et al. teaches and suggest that the ethylene-vinyl acetate copolymer has to be saponified (see column 6, lines 3 to 14, wherein it is disclose that preferably not less than 93% of the EVA is saponified).

The compositions used as barrier layers according to Tachi et al. therefore differs from amended Claim 1 of the present invention in at least the aspect that there is no amount of polyamide and saponified ethylene-vinyl acetate copolymer is given and further in the feature that not one or more olefin-vinyl acetate copolymers as elastomer in a pure form are employed but a saponified ethylene-vinyl acetate copolymer.

Further, Applicants submit no specific mixtures of polyamide and saponified ethylene-vinyl acetate copolymers are suggested in Tachi et al. None of the examples disclose a mixture of polyamide and saponified ethylene-vinyl acetate copolymers is used as barrier layer, but only one specific polymer (see table 1, especially the footnotes below table 1 defining BR-1, BR-2, BR-3 and BR-4). Accordingly, Applicants submit Tachi et al. fails to teach or suggest with any likelihood of success the employment of a mixture of a polyamine and an olefin vinyl acetate copolymer in its pure form.

There is a clear teaching in Tachi et al. that the use of saponified ethylene-vinyl acetate copolymer, i.e. copolymers comprising a substantial amount of -OH-groups is necessary to prepare hollow multi-layer mouldings having excellent barrier properties.

This is supported by the disclosure of Tomoyuki et al. and Toru et al. wherein also saponified ethylene-vinyl acetate copolymers are employed. Further, it is mentioned in Tachi et al. that preferably modified polyamides are employed for improving the bonding properties of the barrier layer (column 5, line 60 to column 6, line 2). This is in accordance with the disclosure of Tomoyuki et al. as well as Toru et al., whereby it is mentioned in Toru et al. that by using modified polyamides in combination with saponified ethylene-vinyl acetate copolymers the rising of the viscosity by blending the two components is avoided (paragraph [0007] in Toru et al.).

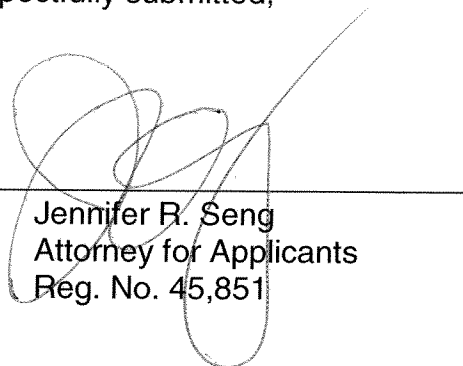
However, it has been found according to the present invention, that it is not necessary to employ saponified ethylene-vinyl acetates in combination with polyamides. Further, it is also not necessary to use modified polyamides. According to the present invention it has surprisingly been found that the buckling endurance of polyamide is improved by blending polyamide with one or more olefin-vinyl acetate copolymers as elastomer. There is no information in any of the documents mentioned by the Examiner that an improvement of the buckling endurance of polyamide is achieved by using olefin-vinyl acetate copolymers as elastomers. Further, it is very surprising in view of the disclosure in the documents mentioned by the Examiner that a polyamide is compatible with a non-saponified olefin-vinyl acetate copolymers, even resulting in superior compositions having an improved buckling endurance.

Since there is no information in any of the documents mentioned by the Examiner that olefin-vinyl acetate copolymers which do not comprise -OH-groups are useful in blendings with polyamides, the amended set of claims of the present invention is not obvious in view of Tachi et al., Toru et al. or Tomoyuki et al.

In view of the above amendments, Applicants submit that the claims are in condition for allowance and the Examiner would be justified in allowing them. The USPTO is hereby authorized to charge any fees, including any fees for an extension of time or those under 37 CFR 1.16 or 1.17, which may be required by this paper, and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

By



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